

## PUT THE BITE ON MOSQUITOES

### UNDERSTANDING WEST NILE VIRUS

Mosquitoes are more than just pesky, there are a number of diseases caused by their bite. One disease, West Nile virus, is relatively new in the United States. In many cases the West Nile virus may cause no symptoms or may cause only a mild illness with symptoms similar to the flu. On rare occasions, the virus causes encephalitis or meningitis that can be a serious health threat for the elderly or people with weakened immune systems. In 2000, West Nile virus caused two deaths in the United States. In contrast, more than 20,000 people die each year from influenza virus infections and 120,000 from lung cancer.

The past few summers, you may have heard about health departments testing dead birds for the West Nile virus. While most birds do not carry the virus, mosquitoes can become infected with the virus by biting an infected bird that is a carrier. Crows and blue jays belong to the family of birds that is particularly vulnerable to the West Nile virus. Several bird carcasses in Maryland and Virginia have been confirmed to be carriers of the West Nile virus. The Fairfax County Health Department initiated testing of dead crows, blue jays, and raptors (hawks) in 1999 and continues to test these birds that appear to have died within the past 24 hours of natural causes. If you find a dead bird that meets these criteria, you are encouraged to call the Fairfax County Health Department at 703-246-2300.

### MOSQUITO BREEDING SITES REMEMBER TO "TIP & TOSS"

Mosquitoes need only a few tablespoons of water to breed. To eliminate mosquitoes breeding in your backyard, check the following areas and tip containers and toss any standing water:

- Roof gutters: clean out leaves and debris blocking and holding water
- Discarded cans & containers: remove, store inside or turn upside down (i.e. trash cans, trash can lids, buckets, bottles, flower pots, pet water bowls)
- Old tires: store tires where they can't collect rainwater
- Bird baths: clean and change the water every five to seven days
- Wading pools: change water regularly and turn over when not in use
- Drainage ditches: keep open and free from debris holding water
- Canoes & boats: cover with a tight-fitting tarp or turn upside down
- Tarps: remove sagging areas
- Ornamental ponds: stock with small fish
- Puddle and swampy areas: drain or back fill
- Miscellaneous: Empty water from toys, wheelbarrows, wagons, unused hot tubs, rain barrels, flat roofs, plastic drain pipes and in-ground pipes

## PREVENTION

Although the threat of West Nile virus is rare, we should take all reasonable steps to protect ourselves. The Health Department continues to monitor the occurrence of West Nile virus and asks residents to be more conscious of the need to eliminate mosquito-breeding areas around their homes. Mosquitoes are poor fliers, so if they are a problem where you live, they most likely were bred in a still water source on or around your property. The most effective way to control mosquitoes is to eliminate or treat the standing water where the larvae live. Otherwise, once adult mosquitoes have emerged, chemical controls give only temporary relief. Running streams and creeks with any water movement or ponds with predators such as fish, frogs or dragonflies are not suitable habitats for mosquitoes.

In addition to eliminating potential breeding sites, the Health Department recommends observing the following precautions to avoid being bitten:

- When visiting an area with lots of mosquitoes, wear long sleeves and long pants.
- Use an insect repellent indicated for mosquitoes and apply according to label instructions.
- Use yellow “bug lights” for outdoor lighting.
- Make sure all window and door screens are in good repair and free from cracks and holes which may provide a method of entry for mosquitos.
- If you do get bitten, keep the bite area clean and avoid scratching. Alcohol or ice applied to the bite will reduce the itching. If the itching or inflammation is extreme, or if infection is suspected, see your physician.

## MOSQUITO DEVELOPMENT

Mosquitoes have four stages in their life—the egg, larva, pupa and adult.

The first three stages occur in water, but the fourth stage, the adult, is an active, flying insect that feeds on human or animal blood.

Stage 1 - The Egg (2-3 days)

Stage 2 - Larva (5-14 days)  
1/4” long; called “wigglers”

Stage 3 - Pupa (2-3 days)  
1/4” around; dark and ball-shaped;  
called “tumblers”

Stage 4 - Adult (males 6-7 days; females 2-16 weeks)

## FOR MORE INFORMATION ON WEST NILE VIRUS

To learn more about what you can do to reduce mosquito breeding around your home or about the West Nile virus, contact the Fairfax County Health Department at 703-246-2300 or visit the following Web sites:

Fairfax County Health Department  
[www.co.fairfax.va.us/service/hd](http://www.co.fairfax.va.us/service/hd)

Centers for Disease Control & Prevention  
[www.cdc.gov/](http://www.cdc.gov/)

Virginia Department of Health  
[www.vdh.state.va.us](http://www.vdh.state.va.us)

Virginia Department of Agriculture  
& Consumer Services  
[www.vdacs.state.va.us](http://www.vdacs.state.va.us)

This document is available in an alternative format upon request. Please call the Fairfax County Health Department at 703-246-2300.

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